

**BY ORDER OF THE
COMMANDER**

AETC INSTRUCTION 21-107

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Maintenance

**MAINTENANCE
MANAGEMENT--MAINTENANCE CONTRACT
SURVEILLANCE**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes procedures for surveilling AETC aircraft and trainer maintenance contracts, using a statement of work (SOW) or performance work statement (PWS) type contract, not specifically addressed by AFMAN 64-108, *Service Contracts*. It implements AFD 21-1, *Managing Aerospace Equipment Maintenance*. This instruction applies to all aircraft maintenance and trainer maintenance contract surveillance activities, including transient alert support, the flight screening program at Hondo, Texas, the wash rack contract at Altus Air Force Base, and aircraft supported by "full" or "partial" contractor logistic support (CLS) activities (as defined in section D). It does not apply to aircrew training device contracts of any type.

Recommendations for change, improvement, or waivers to this instruction should be annotated on AETC Form 1236, **Request for Improving/Changing AETC Maintenance Regulations/Instructions**. Requests must be approved by the appropriate group commander (or squadron commander, if not assigned to a group) prior to forwarding to HQ AETC/LGMMP, 555 E Street East, Randolph AFB TX 78150-4440 for action by HQ AETC/LGM.

A glossary of references, abbreviations, and acronyms used in this instruction is [Attachment 1](#).

SUMMARY OF REVISIONS

This issue is a complete revision. It includes clarification of the Quality Assurance Evaluation Program (QAEP) and the Quality Assurance Surveillance Plan (QASP); incorporates HQ AETC/LGP as the focal point for AETC contracts; updates quality assurance evaluator (QAE) training requirements to reflect changes in Air Force and AETC directives; changes categorization of major and minor discrepancies; updates surveillance documentation requirements to reflect the new requirements of AFMAN 64-108; removes inspection baselines to prevent conflicts with SOWs; adds the requirement to perform inspections on the contractor's quality control program; adds the requirement to surveil training provided by contractors; and clarifies the applicability of this instruction to CLS activities.

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Section A—Responsibilities and Training

1. General Information:

1.1. The functional area chief (FAC) of a contractor operated functional area establishes a quality assurance evaluation program (QAEP) as outlined in this instruction. The functional area includes all maintenance activities as defined in the SOW and PWS.

1.2. For the purposes of this instruction, the term quality assurance evaluator (QAE) is used to describe all government personnel appointed to surveil maintenance contracts and is synonymous with any other terms used in specific weapons system contracts; for example, quality assurance representative (QAR).

1.3. The QAE function is responsible for a wide range of surveillance requirements related to the surveillance of maintenance contracts. Observations are reported to the FAC, administrative contracting officer (ACO), 19 AF/LGM (Maintenance) or 2 AF/LG (Logistics), as applicable, and HQ AETC/LGP or LGMA (for CLS contracts). The QAE also acts as an adviser to the ACO and FAC for contract technical issues. In addition, the QAE evaluates and recommends contract modification, contract recompetition, and award fee criteria and evaluates the effectiveness of the contractor's quality control (QC) program. The QAE evaluates the overall performance of the contractor without duplicating or augmenting the contractor's QC function.

1.4. Section D of this instruction contains specific guidance applicable to the surveillance of CLS contracts that is in addition to the guidance in the rest of this instruction.

2. Functional Area Chief (FAC) Responsibilities. The commander or functional director of the organization is designated as the FAC. If this is not possible, see AFMAN 64-108/AETC Sup 1 for additional guidance. (**NOTE:** For CLS contracts the operations group (OG) commander is designated as the FAC [see paragraph 25].) The FAC must keep up to date on mission changes that could affect the contractor's ability to perform. (Reference HQ AETC/LG Functional Area Chief Executive Summary.) Specifically, the FAC:

2.1. Develops a QAEP that effectively measures and evaluates contractor performance throughout the life of the contract. The QAEP is established and written as a maintenance operating instruction (MOI) that implements the requirements of this instruction, and, as a minimum, includes the QASP (paragraph 7.) and the QAE assessment program (paragraph 20.). The ability of QAEs to determine services received on behalf of the government is directly related to how well the QAEP is developed.

2.2. Notifies Maintenance Requirements (HQ AETC/LGMMR) when QAE positions are expected to become vacant. QAE authorizations will be a minimum grade of TSgt (E-6) and will be filled at 100 percent. All replacements to fill maintenance QAE vacancies will be selected by the Chief of Maintenance-Engineering (HQ AETC/LGM) and coordinated with the chief QAE and FAC at the unit. QAEs are selected based on experience in the career field, weapon system experience, quality force

issues, and supervisor's recommendations. Before any assignment action is finalized, the potential QAE replacement will be coordinated with and approved by the FAC and commander.

2.3. Reviews problem areas identified by the QAE and coordinates with the ACO to resolve the problems. If the problem cannot be resolved, request assistance through 19 AF/LG or 2 AF/LG, as applicable, and HQ AETC/LGP or LGMA (for CLS contracts).

2.4. Ensures the following actions and documents are coordinated with 19 AF/LG or 2 AF/LG, as applicable, and HQ AETC/LGP or LGMA (for CLS contracts) prior to approval and implementation:

2.4.1. Intent or consideration to default or recompet the contract prior to the scheduled recompetition.

2.4.2. Modifications to the contract involving SOW or PWS and scope of work requirements, to include estimated cost.

2.4.3. Changes to the award fee plan.

2.4.4. Locally procured maintenance contracts, such as transient alert or wash rack contracts, drafts, and technical exhibits, as applicable.

2.5. Coordinates temporary waivers with HQ AETC/LGP or LGMA (for CLS contracts) when initiated by the contractor as a result of government action that significantly impairs the contractor's ability to meet established standards. Provide 19 AF/LG or 2 AF/LG, as applicable, an information copy of temporary waivers.

2.6. Approves requests for increase of allowance standards on nonweapons items (budget code 9 and Z).

2.7. Verifies that the contractor submits required reports according to the SOW or PWS and AETC directives.

2.8. Verifies that the contractor performs SOW or PWS requirements according to Occupational Safety and Health Act (OSHA) and Air Force Occupational Safety and Health (AFOSH) standards, as applicable.

2.9. Verifies that the contractor performs SOW or PWS requirements in an environmentally acceptable manner consistent with federal, state, and local environmental laws and Air Force directives.

2.10. Initiates and updates the contract default plan according to AETC Plan 650, AETC Aircraft and Trainer Maintenance Contractor Default Plan.

2.11. Establishes procedures for technical evaluation of contractor submitted value engineering change proposal.

2.12. Participates as a member of the award fee board.

2.13. Monitors and surveils applicable contractor logistics support (CLS) SOW or PWS (reference section D).

2.14. Establishes a QAE assessment program (paragraph 20).

2.15. Selects QAEs to serve on source selection teams.

2.16. Selects and appoints a chief QAE.

2.17. Provides Phase II training to QAEs or QARs at units without on-site contracting officers (paragraph 5.1.).

2.18. Reviews monthly surveillance schedules.

2.19. Ensures QAEs are not assigned additional duties that interfere with their ability to fully meet the time requirements of contract surveillance and other QAE duties.

3. Chief QAE Responsibilities. The purpose of the chief QAE is to ensure surveillance of contractor performance and report noncompliance or abnormalities to the FAC and ACO. In smaller units where it is not practical to designate a chief QAE, the FAC ensures the responsibilities in this paragraph are met. Specifically, the chief QAE:

3.1. Verifies that the contractor meets contract obligations specified in the SOW or PWS.

3.2. Ensures evaluation guides are developed and annually reviews them for adequacy (paragraph 9.).

3.3. Reviews the contractor's quality control program for acceptable quality level in all phases of the contract and recommends acceptability to the ACO through the FAC.

3.4. Ensures each QAE is initially evaluated to determine past qualifications, experience, and ability to accomplish technical inspections and contract surveillance functions. Before performing evaluations, inspections, or surveillance duties unsupervised, each evaluator must be qualified in the appropriate area.

3.5. Periodically, but not less than annually, performs an "over the shoulder" (OTS) evaluation of each primary and alternate QAE in the performance of surveillance activities. The purpose of this evaluation is to ensure proficiency in surveillance techniques. Document the results of the evaluation in the QAE's training records. This may be delegated to the QAE superintendent, or equivalent, in large units.

3.6. Ensures a QAE training program is established and implemented (paragraph 5.). For units without on-site contracting officers, the chief QAE or FAC familiarizes QAEs with the Phase I training required by paragraph 5.1. while the QAE is awaiting formal training.

3.7. Assists the ACO in managing the applicable government-furnished equipment clause of the contract. Specifically, the chief QAE:

3.7.1. Ensures the contractor maintains a current master listing of government-furnished equipment. (Maintain a copy in the QAE office.)

3.7.2. Ensures a joint inventory is conducted by the contractor and a government representative prior to assuming responsibility of a functional area, during option years (or at least annually), and prior to completion of the existing contract as outlined in the SOW, PWS, and Federal Acquisition Regulation (FAR).

3.7.3. Verifies that the contractor acknowledges receipt for all equipment provided by the government.

3.7.4. Ensures adjustments to the master listing of government-furnished equipment are verified and documented by a government representative.

3.8. Develops a monthly summary of QAE surveillance activities and forwards a copy to HQ AETC/LGP or LGMA (for CLS contracts) not later than the 10th workday of the month. If requested, send a

copy of the summary to the ACO, the FAC, and (or) 19 AF/LG or 2 AF/LG, as applicable. Maintain copies of all summaries on file for the life of the contract.

3.9. Ensures copies of modifications and amendments to the contract are forwarded through the FAC, ACO, and 19 AF/LG or 2 AF/LG, as applicable, to HQ AETC/LGP or LGMA (for CLS contracts).

3.10. Assists HQ AETC/LGM, LGP, the FAC, and (or) the ACO in determining contract cost, if requested.

3.11. Calculates award fee data at the end of each quarterly award fee period, using monthly cumulative figures versus monthly percentages, if applicable.

3.12. Assumes QAE responsibilities when circumstances warrant.

3.13. Ensures development and maintenance of the QASP in coordination with the FAC, ACO, and HQ AETC/LGP or LGMA (for CLS contracts). Provide an information copy to 19 AF/LG or 2 AF/LG, as applicable, if requested.

3.14. Ensures monthly surveillance schedules are developed as required in paragraph 8.

4. QAE Responsibilities. QAEs are the eyes and ears of the FAC and ACO relative to the actual application of the contract; however, they are not a quality control function. *QAEs will not direct work or the reaccomplishment of work, change the contract, or formally interpret the contract.* The ACO resolves these types of issues. Specifically, the QAE will:

4.1. Know the specifications and requirements of the contract.

4.2. Know and maintain proficiency in contract surveillance procedures and requirements.

4.3. Know and apply the procedures for documenting surveillance.

4.4. Know the QAEP and perform surveillance according to the QASP.

4.5. Maintain technical competency in their assigned surveillance area.

4.6. Attain qualification in the appropriate areas before performing evaluations, inspections, or surveillance duties unsupervised.

4.7. Review incoming and outgoing official government and contractor correspondence, as applicable.

4.8. Review the deficiency, time compliance technical order (TCTO), and mishap contractor reports for accuracy, adverse trends, and mission accomplishment. Additionally, reviews contractor logistics reports to higher headquarters for possible indicators of performance trends.

4.9. Review all contractor technical order (TO) requirements for waste or abuse. Validate contractor TO requirements (TO 00-5-2).

4.10. Evaluate effectiveness of the contractor's involvement in mishap investigations (AFI 91-204, *Safety Investigations and Reports*.)

4.11. When selected, serve as a member of the source selection team.

4.12. Develop monthly surveillance schedules as required in paragraph 8.

4.13. Perform munitions accountable systems officer (MASO) duties if required (Sheppard, Columbus, Vance, and Reese AFBs only).

5. QAE Training. The FAC and chief QAE are responsible for ensuring QAEs receive required training. The following training requirements apply to all QAEs:

5.1. The ACO provides orientation and training to QAEs on general and specific requirements of contracts to which they are assigned (AFMAN 64-108/AETC Sup 1). The AETC QAE orientation and training program consists of formal classroom instruction conducted at the base contracting office in two phases as identified below. QAEs will complete this training prior to performing surveillance duties. Additionally, formal refresher training is required annually. (**NOTE:** Completion of course 393ATC0066-002, *QAE Maintenance Management Course*, may be used to fulfill the Phase I requirement for all QAE/QARs. Additionally, C-12 and C-21 QARs may meet the Phase I requirement by attending AETC Course L4OST64P3 021-I, *C-12/C-21 Contract Maintenance QAR* [see AFI 21-127, *Contract Quality Assurance*].) For units without on-site contracting officers the chief QAE, or FAC, familiarizes QAE/QARs with the requirements of Phase I training while the QAE/QAR is waiting to attend the applicable formal course. Furthermore, the FAC is responsible for providing Phase II and formal annual refresher training to all QAE/QARs without on-site contracting officers.

5.1.1. Phase I, General QAE Training. Volumes I and II of the AFLMC Quality Assurance Training Program (Quality Assurance Evaluation Program Coordinator (QAEPC) handbook and QAE training guide, dated July 1991) will be used. Training must be tailored to the latest changes in policy and to the needs of the individual QAE when possible.

5.1.2. Phase II, Contract Specific Training. Training must be completed for each contract to which the QAE is assigned to surveil. Training will include a detailed review and discussion of the PWS or SOW and will ensure QAEs have proper understanding of necessary surveillance requirements for respective contracts.

5.1.3. Formal Refresher Training. The ACO conducts annual refresher training for all QAEs except those without an on-site contracting officer. The FAC is responsible for conducting this annual training in units without an on-site contracting officer. As a minimum, the training must include policy and procedures changes, a discussion of potential problem trends, QAE surveillance and documentation requirements, *Joint Ethics Regulation (JER)* (DoD Directive 5500.7-R), and other topics as suggested by the ACO, FAC, or QAE.

5.2. QAEs monitoring aircraft and trainer maintenance contracts must attend Course 393ATC0066-002 within 90 days of assignment to QAE duties. C-12 and C-21 QARs may meet this requirement by attending AETC Course L4OST64P3 021-I (AFI 21-127). The FAC or chief QAE coordinates with HQ AETC/LGMMR to obtain course dates and quotas.

5.3. The FAC and (or) chief QAE are responsible for ensuring refresher training, specialty training, and cross-utilization training (CUT) requirements are met.

5.3.1. There are two types of refresher training, formal and informal. Formal refresher training is conducted annually (paragraph 5.1.). Informal refresher training is considered an on-the-job continuing process provided as needed.

5.3.2. Specialty training is received through schools and experience throughout a career and is commonly referred to as an Air Force specialty code (AFSC) training. CUT training is training received outside the AFSC that is needed to accomplish the QAE surveillance requirements.

5.3.3. The FAC and (or) chief QAE ensures:

5.3.3.1. Cross-familiarization and utilization of QAE personnel in related AFSCs. CUT train-

ing may consist of practical training in a formal training environment. (**NOTE:** There are AFSCs in which personnel must be task-certified before they are qualified to evaluate these tasks. For example, a 2AXXX inspector or evaluator cannot inspect or perform an evaluation on egress components unless they are task-certified.)

5.3.3.2. Initial orientations and evaluations are accomplished.

5.3.3.3. Each area surveilled has a primary and alternate QAE assigned to ensure contract surveillance is accomplished. **NOTE:** Alternate QAEs must possess a maintenance-related AFSC.

5.3.3.4. QAEs are familiar with surveillance and documentation methods and procedures and surveillance schedules.

5.3.3.5. QAEs are familiar with emergency procedures to be implemented if contractor performance is interrupted by default or strike.

5.3.3.6. QAEs maintain training records if required by AFI 36-2201, *Developing, Managing, and Conducting Training*, and (or) the Career Field Education and Training Plan (CFETP) applicable to their AFSC. As a minimum, all QAEs must maintain an AF Form 797, **Job Qualification Standard Continuation/Command JQS**, regardless of grade or skill level, that identifies specific responsibilities required by this instruction or other applicable directives. The AF Form 797 is filed and maintained in the QAE work center. Units may elect to use a locally developed automated product in place of the AF Form 797. If this option is used, the product must contain, as a minimum, all the same data elements as the AF Form 797.

5.3.3.7. All QAEs are knowledgeable of the tasks they surveil. QAEs are not required to be certified on specific tasks; rather, they are duty-position qualified to inspect, surveil, and observe according to the requirements in this instruction and other applicable directives. (**NOTE:** Special emphasis will be placed on knowledge and surveillance requirements for tasks requiring special certification according to AETCI 21-101, Volume 2, *Maintenance Management of Aerospace Equipment*, or other applicable directives.)

5.3.3.8. QAEs requiring special certification authority (red X, etc.) are authorized and designated in writing, either by memorandum (signed by the FAC or unit commander), AETC Form 666, **Change to Inspector/Special Certification Listing**, or AF Form 2426, **Training Request and Completion Notification**. Regardless of the method used, file a copy of the certification with the individual's AF Form 797.

5.3.3.9. QAE sections obtain needed formal training quotas by coordinating with HQ AETC/LGMMR.

Section B—Quality Assurance Evaluation Program (QAEP)

6. Purpose of the QAEP . The QAEP consists of the plans and procedures developed to implement and administer quality assurance requirements for functional areas. The QAEP is established as a unit level MOI that implements the requirements of this instruction, it includes the QASP and the QAE assessment program. (**NOTE:** The QAEP may not incorporate all contractor responsibilities and requirements listed and referenced in TE-1 of the contract.)

6.1. Development of a QAEP is mandatory for all AETC units with contractor-operated maintenance activities that use a SOW or PWS. (**NOTE:** For T-3 QAE activities at Hondo and the USAF Academy as well other AETC maintenance contracts not specifically addressed in this section [for example, stand-alone transient alert or wash rack contracts], the QAEP and QASP will be written based on the SOW or PWS, as applicable, using this section as a guide.)

6.2. An effective QAEP ensures:

6.2.1. The contractor fulfills the requirements of their QC program.

6.2.2. Evaluations are performed according to the QASP (paragraph 7.) and all hours of contractor performance are surveilled, to include all shifts, weekends, nights, and holidays, as applicable.

6.2.3. Lines of communication are open between the functional areas, contract administrators, QAEs, contracting officer (CO), commanders, and contractors.

6.2.4. Unacceptable contractor performance is documented (section C) and acceptable corrective actions are taken.

6.2.5. QAEs are assessed at least annually to determine the overall quality and effectiveness of their performance (paragraph 20.).

6.2.6. QAEs are appointed according to this instruction.

6.2.7. QAEs are trained according to this instruction and other applicable directives.

7. The QASP. The QASP implements the QAEP. The purpose of a QASP is to provide a planned process for surveilling the contractor's actual performance and comparing that performance against the contractual requirements to determine conformity with the technical requirements of the contract. The QASP provides the QAE with information with which they can identify acceptable performance and potential reasons for any nonconforming performance. QASPs incorporate guidance contained in the contract, including the contractors QC program, contractor directives, required publications listed in section C-6 of the contract, applicable portions of advisory publications (Air Force, AETC, and local), and applicable TOs.

7.1. Successful long-term contract administration is dependent upon adequate communication channels between the QAE, CO, FAC, and contractor and upon how well the QASP is written and understood.

7.2. Surveillance may be performed during the completion of contractor QC inspections or independently.

7.3. Regardless of the method used, the actual surveillance is accomplished according to the monthly QAE surveillance schedule (paragraph 8.).

7.4. Surveillance requirements are identified in the QASP. They are categorized as either technical or observation work area inspections. Guides (in checklist format) are used to perform periodic surveillance and evaluation of observation work areas (paragraph 9.).

7.4.1. Technical Area Inspection Requirements. Minimum technical area surveillance requirements and frequencies for T-37, T-38, AT-38, and T-1 aircraft are identified in [Attachment 2](#). Minimum surveillance technical area inspection requirements and frequencies for training wings (TRW) are in [Attachment 3](#). Any additional surveillance requirements associated with mainte-

nance contracts for flying or training units, such as transient maintenance or weekend work, are jointly determined by the CO, chief QAE, and the FAC, using the SOW or PWS as a guide.

7.4.1.1. CLS contracts follow the applicable technical surveillance guidance identified in section D of this instruction.

7.4.1.2. The T-3 QAE activities at Hondo and the USAF Academy along with other AETC maintenance contracts not specifically addressed in this section (for example stand-alone transient alert or wash rack contracts) will use their SOW or PWS to determine technical area surveillance requirements.

7.4.2. Observation Work Area Inspection Requirements. Minimum observation work area surveillance requirements for flying units are found in [Attachment 4](#). TRW minimum requirements are found in [Attachment 5](#).

7.4.2.1. CLS contracts follow the applicable observation work area surveillance guidance identified in section D.

7.4.2.2. The T-3 QAE activities at Hondo and the USAF Academy along with other AETC maintenance contracts not specifically addressed in this section (for example stand-alone transient alert or wash rack contracts) use [Attachment 4](#) and [Attachment 5](#) as guides, the information in paragraph [11.](#), and their applicable SOW or PWS to identify observation work area surveillance requirements.

7.4.3. Missed Surveillance or Inspection Frequencies. If minimum monthly surveillance requirements cannot be met due to equipment nonavailability or special circumstances, include an explanation on the summary for each missed area and (or) inspection category. In such cases, a statement of FAC and ACO approval for the variance is required. When individual surveillance or inspection frequencies are missed for more than one prescribed period, notify, in writing, HQ AETC/LGP or LGMA (for CLS contracts).

7.5. In addition to the requirements in the preceding paragraphs, the QASP will:

7.5.1. Clearly identify the QAE's responsibilities.

7.5.2. Identify surveillance techniques and their application, and explain how to document and report unacceptable performance.

7.5.2.1. The four methods of surveillance available to the QAE include random sampling, periodic surveillance, 100 percent inspection, and customer complaints. Periodic surveillance and customer complaints are the least preferred methods of surveillance because they cannot be used as a basis of deduction from payment. However, use of customer complaints may be necessary for certain types of tasks that do not lend themselves to random sampling or 100 percent inspection. (See AFMAN 64-108 for additional information.)

7.5.2.2. The sources of information available include management information systems, observation of task attributes, and observation of performance.

7.5.3. List procedures for acquisition, transfer, and control of government-furnished equipment. (**NOTE:** Prior to the end of the basic year and option years [or at least annually], contract and government representatives will conduct a complete inventory of government-furnished equipment.)

7.5.4. Establish and assign responsibilities for verifying costs of reimbursable items, such as tools and contractor proposals the contractor provides.

7.5.5. Include procedures for development and coordination of monthly surveillance schedules.

7.5.6. Ensure all hours of contractor performance are surveilled, to include all shifts, weekends, nights, and holidays, as applicable.

7.5.7. Include a program to regularly, yet randomly, sample supply management aids, such as the D04, M30, D23, R49, D18, D19, R35, M04, S04, and Q13 for signs of waste, abuse, or poor supply discipline.

7.5.8. Establish surveillance requirements to monthly sample foreign object (FO) inspections on aircraft, engines, and support equipment.

7.5.9. Establish procedures to effectively monitor the contractor's compliance with federal, state, and local laws as well as Department of Defense (DoD) and Air Force (AF) directives, and the installation's applicable environmental plans and programs.

7.5.10. Establish a surveillance program to effectively monitor compliance with the contractor's training plan prescribed in the contract to ensure that training provided meets applicable qualification and training standards. QAEs will place special emphasis on the adequacy of the training provided by the contractor. Observations are rated in accordance with paragraph 16.

7.5.10.1. Surveillance will include random monthly observance of a percentage of task qualification and certification training, to include training associated with special certification tasks.

7.5.10.2. Additionally, surveillance will include random quarterly observance of recurring maintenance training requirements.

7.5.10.3. In addition to actually observing the training as it takes place, the surveillance will include a review of training documentation, individual training records, and plans of instruction, if applicable.

8. Surveillance Schedules. The QAE is responsible for developing a monthly schedule of surveillance activities based on QASP requirements. The schedule must be completed not later than 7 calendar days prior to the beginning of the period it covers. The FAC must review and return the schedule to the QAE no later than the last day of the month preceding the schedule month. The QAE must provide a copy of the schedule to the contract administrator before the start of the surveillance period. *The surveillance schedule is FOR OFFICIAL USE ONLY and must not be disclosed to the contractor.* Changes to scheduled observations are posted weekly and copies sent to the ACO and FAC as requested. (See AFMAN 64-108, chapter 6, for additional information on surveillance schedules.)

9. Evaluation Guides . Develop a separate evaluation guide for each observation area (paragraph 11.). Identify each guide by a number that corresponds to the number of the area observed as specified in **Attachment 4** and **Attachment 5**. If subcategories are needed, identify them by using a decimal number; for example, 1.1, 1.2, etc. All evaluation guides, unless classified, are collated into single packages with an index. Identify locally determined evaluation guides by alpha characters. The chief QAE reviews evaluation guides annually and documents this review on AF Form 2411, **Inspection Document**, for each package. (**NOTE:** Do not include evaluation guides as a portion of any operating instruction . Evaluation

guides may be disclosed to the contractor upon ACO or freedom of information (FOIA) request. When guides are changed, the contractor must request the updated versions. Evaluation guides will be used for the inspection of a particular area; however, contractors are not limited to the evaluation guide content only. Annotate evaluation guides with the following statement: "Area inspection is not limited to the content of evaluation guide.")

10. Technical Areas . Technical requirements are surveilled by performing the quality verification inspections (QVI) and technical validation inspections (TVI). The QVI is performed only after the fact, while the TVI is an inspection that is accomplished while maintenance is being performed or soon after completion.

10.1. QVI. A QVI is a technical inspection of an item of equipment accomplished by a QAE following a maintenance inspection or repair action. The purpose of a QVI is to determine whether or not the maintenance actions were properly accomplished and to measure the *overall* condition of the equipment.

10.1.1. The QVI is limited to the same inspection workcard or TO required for the job. Normally, disassembly of a part, removal of a stress panel, and similar actions are not necessary to accomplish a QVI. The QVI for required -6 TO inspections may be accomplished by checking a minimum of 50 percent of the required inspection items. The quality of equipment determined through the QVI must be reported to the owning work center and other activities contributing to the condition of the equipment.

10.1.2. During QVIs, the QAE reviews appropriate documents and equipment forms (to include the inspection workcards), work unit code manuals, and maintenance checklists for accuracy and currency. Use of Core Automated Maintenance System (CAMS) (or other automated maintenance management systems) deferred discrepancy listings is encouraged. The documented maintenance list, supply requisition inquiry, and event listing are three suitable products.

10.1.3. QVIs are assigned ratings of either acceptable or unacceptable. Unacceptable ratings are assigned when one of the following conditions occurs: a major or red X chargeable discrepancy is detected or the number of chargeable minor discrepancies exceeds the baseline contained in the SOW. Acceptable ratings are assigned when the total number of minor chargeable discrepancies does not exceed the applicable baseline contained in the SOW or PWS.

10.2. TVI . TVIs are used to determine the quality of maintenance during, or soon after, performance of any on- or off-equipment maintenance task. TVIs are not used to determine proficiency of contractor personnel.

10.2.1. There are two types of TVIs: over the shoulder (OTS) and after the fact (ATF). OTS inspections are performed while an individual or group is actually performing a task. ATF inspections are performed after a task is completed and documented. OTS and ATF inspections may be limited to a *portion* of a task. ATF inspections are not performed after equipment is operated when such operation can invalidate conditions present when the task was accomplished.

10.2.2. All TVI surveillance requirements identified in unit QASPs will include a percentage of both OTS and ATF inspections. Units will determine these percentages locally and identify them in the QASP.

10.2.3. All units will perform inspections on the contractor's quality control evaluation program. These inspections may be performed in conjunction with other inspection requirements. If this

option is used, document each inspection independently. T-37, T-38, AT-38, and T-1 units will follow the guidance in attachment 2 as a minimum. All other units, to include CLS contracts, will identify select inspections contained in their applicable QASP for inspection of the contractor's quality control evaluation program (use the requirements in attachment 2 as a guide for selection and frequency of inspections). Include these requirements in the QASP and the monthly surveillance schedule.

10.2.4. TVIs (ATF and OTS) are assigned ratings of acceptable or unacceptable. Unacceptable ratings are assigned when one or more of the following conditions occur: a safety violation is detected (reference paragraph 15), a step serious enough to adversely affect the performance of the equipment involved is omitted or improperly completed, or a major or red X discrepancy is identified. Acceptable ratings are assigned when the total number of minor discrepancies does not exceed the applicable baseline contained in the SOW or PWS.

11. Observation Areas . Observation work areas are surveilled by performing inspections in specific work areas.

11.1. As a minimum, each work area inspection will include the following critical items, if applicable:

11.1.1. Composite tool kit (CTK), flight line, hangar, and jet engine operating areas for FO and proper housekeeping.

11.1.2. Supply procedures; TO maintenance; AFTO forms documentation; and recording of information in automated systems such as CAMS (includes all subsystems), PMEL Automated Management System (PAMS), Automated Oil Analysis, and any other automated system that includes aircraft or equipment information.

11.1.3. Additionally, observation areas are inspected for physical security, conservation of utilities, safety, fire prevention, environmental protection, and facilities management.

11.1.4. Chief QAEs should consider placing these minimum requirements into a single general guide. General guides, if established, are developed using the procedures in paragraph 9, and must be used with the applicable shop evaluation guide according to the frequencies listed in **Attachment 4** for flying units and **Attachment 5** for TRWs. Identify this guide with an ALPHA character. Shop evaluation guides should contain minimum inspection areas or items and not include overwhelming requirements which may cause an overinspection of a particular shop.

11.2. Observation inspections may be either scheduled or unscheduled; however, only observations scheduled in the QASP may be used to determine or apply a rating for acceptable performance according to contract standards in TE-1.

11.3. Scheduled observation area inspections are normally scheduled inspections performed by using observation area evaluation guides. They are rated either acceptable or unacceptable. An unacceptable rating is assigned when a major discrepancy is identified or seven or more minor discrepancies are identified. Acceptable ratings are assigned when no major discrepancies are identified and the number of minor discrepancies found is less than seven.

11.4. Unscheduled observations are "as observed" inspections of areas where maintenance or maintenance-related tasks are being performed. They occur when deficiencies are discovered that are not

directly associated with another type of inspection being evaluated or observed. "As observed" deficiencies must be reported.

12. Discrepancy Categories. To ensure consistency when determining severity of discrepancies, the following definitions and criteria apply to technical and observation area inspections:

12.1. Major Discrepancy . A discrepancy that judgment and experience indicate is likely to result in a hazardous or unsafe condition or is likely to result in failure or reduce materially the usability of aircraft or equipment to include any major part thereof. Discovery of any of the following conditions will be categorized as a major discrepancy:

12.1.1. Improper or untimely documentation of red X discrepancies on aircraft, trainer, or equipment AFTO forms (to include automated system entries).

12.1.2. Foreign object (FO) within 50 feet of an aircraft parking or engine operating area.

12.1.3. Test, measurement, diagnostic equipment (TMDE) overdue calibration or when calibration status cannot be verified.

12.1.4. Violation of OSHA and (or) AFOSH standards. (**NOTE:** Discrepancies that do not present a safety hazard or create an unsafe or potentially unsafe condition are not considered major. QAEs will use experience and judgment in determining the severity of such discrepancies.)

12.1.5. Violation of environmental protection federal, state, or local laws and (or) Department of Defense or Air Force policies and directives.

12.1.6. Overdue time change and inspection items (-6 TO asterisk items) and unauthorized engine overflies.

12.1.7. Any errors in cartridge actuated device/propellant actuated device (CAD/PAD) verification documents.

12.1.8. Any long-term inspections not loaded; any due time errors or improperly loaded low cycle fatigue cycle items.

12.1.9. TO violations or violations of mandatory directives, as supplemented, and improper use of tools or use of *out-of-date* technical data *when such may cause damage to government property or injury to government personnel* (reference TO 00-5-1).

12.2. Minor Discrepancy . A discrepancy that is not likely to reduce, materially, the usability of aircraft, trainers, or equipment or is a departure from established requirements having little impact. (**NOTE:** If the QAE determines it is appropriate, minor discrepancies that consist of a grouping of like deficiencies; for example, a bench stock with 6 comingled bins, 10 bins not flagged, and 4 bins with torn labels may be documented as one discrepancy against the observation guide.)

13. Documentation File Inspections . Documentation file inspections for aircraft, support equipment, and engines are rated. The inspections include review of the status and historical documents (including automated documents) for the previous 60 days. Discrepancies found in the historical documents file are sent to the contractor for corrective action. Actual discrepancies are not corrected except for items of a historical nature, including automated documents that can be verified from other sources. Specifically:

13.1. Each incorrect clearing of a red X symbol, erasures of symbols, overdue time change items, and overdue inspections caused by improper documentation are considered major discrepancies. The cor-

rect use and clearance of red X symbols must be items of special attention during documentation file inspections. QAEs must ensure unsafe or unfit for operation conditions were represented by red X entries and these entries were properly cleared.

13.2. Documentation errors on forms initiated at other than the home station or generated by non-maintenance personnel are not chargeable against the contractor but must be corrected if the deficiency affects historical or automated information.

13.3. A major discrepancy or more than three minor discrepancies will result in an unacceptable rating. All other conditions will be rated acceptable.

14. FO Inspections . Establish a monthly schedule of FO inspections within the QASP to sample aircraft, engines, and support equipment. Route a copy of FO inspection reports to the unit foreign object damage (FOD) officer, as required, to meet the requirements of AFI 21-101, *Maintenance Management of Aircraft*.

15. Documentation of Safety Violations . If QAEs identify violations of OSHA or AFOSH standards, they document the violations and forward the report to the ACO for action. (**NOTE:** Discrepancies that do not present a safety hazard or create an unsafe or potentially unsafe condition are not considered major. QAEs will use experience and judgment in determining the severity of such discrepancies.)

15.1. The QAE observing any act that could cause immediate injury to personnel or damage to property will take immediate action to stop the unsafe act.

15.2. Except as specified for TVIs and observation area surveillance, do not use "as observed" safety violations to determine contractor compliance with QASP requirements.

16. Training Observations . QAEs will assign a pass or fail rating to contractor training observations based on whether or not the training observed meets the standards and intent of the contractor's training plan as well as the objectives of the training being provided.

17. Validation of Information. The chief QAE will verify statistical information provided by the contractor that concerns the standards specified in TE-1 of the applicable contract to ensure accuracy, completeness, and adequacy, and coordinate this information with supply and operations prior to final validation when applicable. For award fee contracts, the chief QAE forwards the applicable information to the FAC. (*Exception:* The senior functional check flight (FCF) pilot validates FCF release rates, if applicable.)

18. FCF Pilot Responsibilities. When FCF pilots are assigned to the QAE activity, they may assist the FAC and chief QAE as necessary. Additionally, these FCF pilots, after completing QAE training requirements described in paragraph 5.1. may perform no-notice installed engine operation inspections as prescribed in [Attachment 2](#) and training according to AFI 11-218, *Aircraft Operation and Movement on the Ground*/AETC Sup 1. FCF pilots will inform the chief QAE of problems or adverse trends in contractor performance noted when performing FCFs.

19. Compiling Results. Compute individual inspections, technical area, observation area, and overall results as follows: *Total number of inspections rated satisfactory divided by the total number of inspections multiplied by the 100-percent rate.*

20. QAE Assessment Program. This program provides the FAC with a means to assess the overall quality and effectiveness of the unit's QAE performance in surveillance of the contract requirements. As a minimum, the FAC will use the program assessment metrics in **Attachment 6** to administer the program. Specifically, the FAC will:

20.1. Establish a QAE assessment program based on the individual unit size, needs, and mission requirements. Include this program in the QAEP operating instruction.

20.2. Select a third party to annually assess the QAE program, using the quality assessment metrics at **Attachment 6** as a minimum. If possible, the third party selected should have a maintenance or contract surveillance background.

Section C—Surveillance Documentation

21. Documentation of Contractor Performance. The following documentation procedures apply (**NOTE:** QARs surveilling C-12/C-21 CLS contracts use the forms prescribed by MCR 66-4, *Contract Quality Assurance*, [projected to become AFI 21-127, *Contract Quality Assurance*], MCPAM 21-1, *C12 C/F Mandatory Government Inspection [MGI] Pamphlet*, [projected to become AFPAM 21-125, *C-12 C/F MGI Pamphlet*] and MCPAM 66-32, *C-21A MGI Pamphlet*, [projected to become AFPAM 21-126, *C-21 MGI Pamphlet*].)

21.1. Surveillance Documentation . Use AF Form 799, **Surveillance Activity Checklist**, AF Form 372, **Contract Monitoring and Surveillance Report**, AETC Form 447, **Routing and Review of QAE Reports**, or a locally devised form to document discrepancies discovered during scheduled observations. When a discrepancy is discovered, the contractor is notified as soon as the surveillance is completed and asked to initial the document on which the observation is recorded. If the contractor representative refuses to initial, it is so noted by the QAE. A date and time the discrepancy is discovered is also annotated and the contract representative is asked to correct the problem. Errors found in services not scheduled for observation should be documented and brought to the attention of the contractor but not used to determine performance acceptability.

21.2. Unacceptable Performance . If at any time during the surveillance period, the results of surveillance show that the number of unacceptable observations does not meet standards or performance requirements, and the QAE determines it is not government caused, the QAE initiates an AF Form 802, **Contract Discrepancy Report (CDR)**, or AF Form 370, **Contract Performance Evaluation Report**.

21.2.1. The report is forwarded to the CO for evaluation. If the CO determines it is appropriate, the report is sent to the contractor, with return receipt requested. The contractor has 15 calendar days from date of receipt to return the report to the CO with a response as to cause, corrective action, and actions taken to prevent recurrence.

21.2.2. The CO, in consultation with the QAE, evaluates the contractor's response and takes appropriate action. (See AFMAN 64-108 for specific procedures.)

21.3. Customer Complaints . Use AF Form 714, **Customer Complaint Record**, or a locally devised form to document customer complaints.

22. Surveillance Reviews. All surveillance documentation recorded on AF Form 799, AF Forms 372, AETC Forms 447, or locally devised forms is forwarded to the ACO for review within 5 workdays after the end of each month.

23. Award Fee Management. The award fee evaluation plan outlines the procedures and evaluation periods for the award fee provisions of the contract. Award fee criterion (rules and standards) is the reference point for all award fee determinations. Distinct and clear criteria must be established as the basis for award fee determinations. The award fee process begins with the QAE. The QAE monitors contractor performance throughout the quarterly award fee evaluation period. The contract award fee board (CAFB) computes the award fee. Based upon the findings of the CAFB, a recommendation is made to the fee-determining official (FDO)--usually the wing commander. The FDO weighs the recommendation and prepares a memorandum of authorization and payment to pay the fee. Feedback is provided during and after the evaluation period to ensure the contractor is aware of both the positive and negative aspects of performance. The FDO's decision is final and cannot be disputed. The government reserves the right to make changes to the plan in advance of the contract period.

Section D—Contract Logistic Support (CLS) Surveillance

24. Contents and Applicability. This section describes the additional and (or) particular duties, responsibilities, and specific surveillance requirements of FACs, QAEs, QARs, technical representatives of the contracting officer (TRCO), and project monitors for the contracting officer (PMCO) appointed to surveil CLS contracts within AETC. The terms QAE, QAR, TRCO, PMCO, and any other terms used to describe government personnel appointed to surveil contracts are synonymous and are distinguished only by the CLS contract written for a specific weapon system. AETC has a variety of contracts associated with aircraft and trainer support. This section addresses contracts that are awarded by the Oklahoma City Air Logistics Center (OC-ALC). The weapon system program directors (SPD), their staffs, and procuring contracting officer (PCO) are located at OC-ALC. The ACO resides at a regional defense contracting management area office and interfaces routinely with the FAC, PCO, and the QAE, QAR, TRCO, and PMCOs who monitor the contracts.

25. CLS Contract Management. CLS contracts outline QAE, QAR, TRCO, and PMCO duties and responsibilities that are in addition to the requirements contained in this instruction. These duties and responsibilities are further defined by the individual contract PCO and ACO and are delegated to senior Air Force representatives at each main operating base that utilizes the weapon system.

25.1. Within AETC, the OG commander is designated the FAC for CLS contracts. (**NOTE:** For units without an OG commander, the commander of the unit to which the QAE function is assigned is designated as the FAC.) The FAC can delegate all or part of these responsibilities to the QAE function. These delegations must be in writing and the names forwarded to the ACO, PCO, and HQ AETC/LGMA.

25.2. Aircraft CLS contracts vary slightly between weapon systems, depending on the supplies and services provided by the CLS contractor. For the purposes of this instruction, CLS contracts are identified as "full" or "partial" CLS. A weapon system using "full" CLS is one where a single contractor provides both on- and off-equipment maintenance support. A "partial" CLS contract provides only off-equipment maintenance support through a contractor operated and managed base supply (COMBS).

26. FAC, QAE, QAR, TRCO, and PMCO Responsibilities. These individuals must have a thorough understanding of the CLS concept to fulfill their duties. As a minimum, they must have a copy of the contract and the applicable SOW. They must also understand the differences between site services maintenance contracts and CLS contracts and the interface of the two when they support one weapon systems at one location.

27. QAE, QAR, TRCO, and PMCO Surveillance Requirements. This paragraph identifies specific surveillance requirements particular to CLS contracts.

27.1. The lead command for the C-21 and C-12 aircraft is the Air Mobility Command (AMC). Both of these aircraft are supported by "full" CLS contracts. MCR 66-4, *Contract Quality Assurance*, (projected to become AFI 21-127, *Contract Quality Assurance*) contains guidance applicable to those specific contracts that is in addition to the requirements of this instruction. QARs should identify any conflicts between MCR 66-4 and this instruction to HQ AETC/LGMMP. Specific technical and observation work area surveillance requirements for C-12 and C-21 contracts are in MCPAM 21-1, *C12 C/F Mandatory Government Inspection (MGI) Pamphlet*, (projected to become AFPAM 21-125, *C-12 C/F MGI Pamphlet*) and MCPAM 66-32, *C-21A MGI Pamphlet* (projected to become AFPAM 21-126, *C-21 MGI Pamphlet*). Additionally, QARs use the forms prescribed by these publications to document surveillance. (**NOTE:** Observation work area surveillance guidance for "full" CLS contracts is in paragraph 7.)

27.2. The T-1, T-3, and the T-43 are supported by "partial" CLS contracts. The QAE, QAR, TRCO, and (or) PMCO surveilling these "partial" CLS contracts will:

27.2.1. Be thoroughly familiar with the CLS concept and the applicable CLS SOW.

27.2.2. Review CLS contract amendments and airworthiness directives, service bulletins, and service instructions received for the weapons system. Air Logistics Center SPD, in coordination with the using command headquarters, determines the implementation of technical directives.

27.2.3. Attempt to resolve technical problems at the lowest level possible. If problem resolution is beyond local capability or has contractual implications, the problems should be elevated through the applicable HQ AETC functional manager to the PCO for the contract. The FAC, QAE, QAR, TRCO, or PMCO is not empowered to make contractual decisions.

27.2.4. Attend program management review and technical interchange meetings as scheduled by the ACO or SPD, as applicable.

27.2.5. Serve as a member of the recompetition source selection board when directed.

27.3. For "partial" CLS COMBS contracts, the FAC, QAE, QAR, TRCO, and (or) PMCO will develop a tailored QASP to meet the surveillance and documentation procedures for a "partial" CLS contract. Forward a copy of this plan to HQ AETC/LGMA. As a minimum, the following will be accomplished:

27.3.1. Submit a monthly verification of not-mission-capable supply time to the ACO or SPD.

27.3.2. Verify work requests and over and above actions submitted by the CLS contractor.

27.3.3. Investigate cannot-duplicate discrepancies if reported by the COMBS manager.

27.3.4. Perform periodic safety, environmental, and housekeeping inspections of the COMBS facility.

27.3.5. Review and monitor the contractor support equipment maintenance schedule.

27.3.6. Monitor the depot maintenance schedule, if applicable, for aircraft and engines paying particular attention to timely inputs.

Section E—Forms

28. Forms Prescribed . AETC Form 447.

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Director of Logistics

Attachment 1

GLOSSARY OF REFERENCES, ABBREVIATIONS, AND ACRONYMS

References

AETCI 21-101, Volume 2, *Maintenance Management of Aerospace Equipment*
AETC Plan 650, *AETC Aircraft and Trainer Maintenance Contracting Default Plan*
AFI 11-218, *Aircraft Operation and Movement on the Ground*
AFI 21-101, *Maintenance Management of Aircraft*
AFI 36-2201, *Developing, Managing, and Conducting Training*
AFI 91-204, *Safety Investigations and Reports*
AFIND 2, *Numerical Index of Standard and Recurring Air Force Publications*
AFMAN 64-108, *Service Contracts*
DoD Regulation 5500.7-R, Joint Ethics Regulation (JER)
Federal Acquisition Regulation (FAR)
MCPAM 21-1, C12 C/F Mandatory Government Inspection (MGI)
MCPAM 66-32, C-21A Mandatory Government Inspection Pamphlet
MCR 66-4, *Contract Quality Assurance*

Abbreviations and Acronyms

ACO—administrative contracting officer
AFOSH—Air Force Occupational Safety and Health
AFSC—Air Force specialty code
AGE—aerospace ground equipment
ATF—after-the-fact
BPO—basic postflight inspection
CAD/PAD—cartridge/propellant actuated devices
CAFB—contract award fee board
CAMS—Core Automated Maintenance System
CASS—Centralized Aircraft Support System
CFETP—Career Field Education and Training Plan
CLS—contractor logistics support
CO—contracting officer
COMBS—contractor operated and maintained base supply

Comm/Nav—communication/navigation
CTK—composite tool kit
CUT—cross-utilization training
FAC—functional area chief
FCF—functional check flight
FDO—fee determining official
FO—foreign object
FOD—foreign object damage
HPO—hourly postflight
IBL—inspection baseline
Insp—inspection
MASO—munitions accountable systems officer
MDS—mission, design, series
MOI—maintenance operating instruction
OSHA—Occupational Safety and Health Administration
OC-ALC—Oklahoma City-Air Logistics Center
OG—operations group
OTS—over-the-shoulder
PAMS—PMEL automated management system
PCO—principle contracting officer
PE—periodic
PMCO—project monitor for contracting officer
PMEL—precision measurement equipment laboratory
PWS—performance work statement
QAE—quality assurance evaluator
QAEP—quality assurance evaluation program
QAR—quality assurance representative
QASP—quality assurance surveillance plan
QC—quality control
QVI—quality verification inspection
SOW—statement of work
SPD—system program director

TCTO—time compliance technical order

TMDE—test, measurement, and diagnostic equipment

TO—technical order

TRCO—technical representative of the contracting officer

TVI—technical validation inspection

TRW—training wing

Attachment 2

T-37, T-38/AT-38B, T-43, AND T-1 TECHNICAL AREA REQUIREMENTS

The requirements listed in table A2.1 are minimum requirements. Inspections and evaluations in the areas and quantities listed are monthly requirements unless otherwise noted. When computing frequency, round off requirements to the next whole number. QVI and TVI requirements are for each mission, design, series (MDS) assigned. Quarterly surveillance requirements will be scheduled on a random, yet adequately distributed basis. For example, an inspection completed in the last week of a quarter should not be scheduled for inspection again during the first week of the new quarter.

Table A2.1. T-37, T-38/AT-38B, T-43, T-1 Technical Area Requirements.

I	A	B	C	D	E
T E M	Inspection (Per MDS)	QVI Frequency	Notes	TVI Frequency	QC Inspection Frequency
1	Preflight, Basic Postflight (BPO), Home Station Check, and Thruflight Inspection (includes combined preflight/postflight)	7%	1,2,3	1	1
2	Hourly Postflight, or Isochronal Inspection	5%	1,4,3	1	1
3	Periodic (PE) Inspection	10%	1,4,3	1	1
4	Phased Inspection (T-1 only)	10%	1,4,3	1	1
5	Liquid Servicing			1	
6	Gaseous Servicing			1	
7	Ground Movement			1	
8	Flight Control Rig/Maintenance		3	1	1
9	Landing Gear Maintenance (includes Wheel and Tire)		3	1	1
10	Canopy Rig		3	1	1
11	Throttle Rig		3	1	1
12	Egress Maintenance		3	1	1
13	Brake System Maintenance			1	
14	T-38/AT-38B Boattail Installation		3	2	1
15	Aircraft Wash and Corrosion Control	2%	4	1	
16	Environmental Systems Maintenance			1	
17	Avionics System Maintenance			1	
18	Electrical System Maintenance			1	
19	Fuel System Maintenance			1	
20	Installed Engine Run		3	1	1
21	Uninstalled Engine Run		3	1	1
22	Document File Inspection	2%	1,4,5		
ENGINES					
23	Engine PE/Hourly Postflight (HPO) Inspections	10%	1,6,3	1	1
24	Built-up Engines	5%	1,7	1	
25	Engine Rig			1	
26	Engine Installation		3	1	1
27	Document File Inspection	2%	1,6,5		
SUPPORT EQUIPMENT					
28	Powered Aerospace Ground Equipment (AGE) Service			2	

29	Powered AGE and Centralized Aircraft Support System (CASS) Periodic	2%	1,8	1
30	Nonpowered AGE	1%		1
31	TMDE	2	9	
32	Industrial/Test Equipment, and Special Tools			1
33	Personnel Parachute Repack	4		1
34	Emergency Escape and Survival Equipment Inspection for T-1			1
35	TCTOs	First 2%		
36	AETC Special Inspection	Locally determined		1
37	Transfer/Acceptance Inspections	Locally determined		1
38	Document File Inspections	2%	1,8,5	
39	Historical Static Display	1	1,10	
WEAPONS/MUNITIONS				
40	Weapons loading tasks (i.e., Arm/Dearm, Loading, Immediately Prior to Launch)		11	4
41	SUU-20 End of Firing Day		11	1
42	SUU-20 180 Day Inspection		11	1 per quarter
43	MA-4 Bomb Rack Inspection/AT-38 Weapons Pylon Inspection		11	1

NOTES:

1. Perform an inspection of all active forms and documents in conjunction with aircraft and support equipment QVIs.
2. Number of required QVI inspections is based on percentage of aircraft possessed or percentage of inspections scheduled monthly, whichever is less. Any combination of preflight, basic postflight, home station check, thruflight, etc., selected to meet the monthly inspection requirement may be used. Example: Fifty-five aircraft possessed equals four QVIs. One preflight, one thruflight, and two basic postflight QVIs would meet the minimum requirement of four inspections. (Do not include aircraft in storage or at forward operating locations in computations for inspection requirements to be performed at home station.)
3. Quality control (QC) inspections are performed on the contractor's QC evaluation program. QC inspections will include a percentage of QVI and TVI (ATF and OTS) as determined by the chief QAE.
4. Number of required QVI inspections is based on percentage of aircraft possessed or percentage of inspections, washes, TCTOs, etc., scheduled monthly, whichever is less. For T-37 and T-38/

AT-38B PE QVIs, the sum of all areas equal one aircraft. For T-1 aircraft, provide equitable phase inspection distribution.

5. As a minimum, inspect document files, if maintained, for each aircraft, engine, and item of support equipment on each periodic maintenance, isochronal inspection, and Phase QVI.
6. Number of required QVI inspections is based on a percentage of inspections scheduled for the month. Inspections are conducted primarily during reassembly of the engine.
7. Number of required QVI inspections is based on the monthly average number of engines processed through the propulsion repair facility during the previous 6 months. It consists of technical requirements that can be inspected without disassembly of the engine.
8. Number of required QVI inspections is based on total number of inspections regardless of MDS. Provide equitable inspection distribution. As a minimum, one of each MDS must be inspected at least once each 6 months.
9. Inspect TMDE for adequacy of user inspections, repairs, serviceability, calibrations, and corrosion control.
10. Number of required QVI inspections is based on the percentage of displays possessed or percentage of inspections, washes, etc., scheduled monthly, whichever is less. Each display must be inspected at least once every 2 years.
11. Applies to AT-38 aircraft only.

Attachment 3

TRAINING WING (TRW) TECHNICAL CATEGORIES AND FREQUENCIES

The inspection categories and frequencies listed in table A3.1 are minimum requirements. Inspections in the areas and quantities listed are monthly requirements unless otherwise noted. When computing frequency, requirements will be rounded off to the next whole number. Representative sample is defined as at least one inspection.

Table A3.1. TRW Technical Area Frequencies.

I	A	B	C
T	Trainers	Frequencies	Notes
E			
M			
1	End Item Trainers (Aircraft, Missiles, Vehicles, Engines, etc.,) used for Training	5%	1,2
2	Subsystem Trainers (Landing Gear, Fuel System, Flight Control, etc.,) used in lieu of System or End Item	5%	1,2
3	Other Trainers That do not Fall in the Above Categories	5%	1,2
Support Equipment			
4	AGE (Powered and Nonpowered)	5%	1,3
5	TMDE	4	4
6	Industrial Equipment	1	
Special Inspections			
7	Historical Static Displays	5%	1,5
8	Document File	2%	6
9	Transfer and Acceptance	As Required	
10	TCTOs	Representative sample	
11	Foreign Object (FO)	Determined locally	lo- 7
12	TO Files	Determined locally	lo- 7

NOTES:

1. Perform an inspection of all active forms and documents in conjunction with equipment QVIs.
2. Number of required inspections is based on the percentage of trainers possessed or percentage of inspections, washes, etc., scheduled monthly, whichever is less.
3. Number of required inspections is based on total number of inspections regardless of MDS. Provide equitable inspection distribution. As a minimum, one of each MDS must be inspected at least once each 6 months.

4. Inspect TMDE for adequacy of user inspections, repairs, serviceability, calibration, and corrosion control.
5. Number of required inspections is based on the percentage of displays possessed or percentage of inspections, washes, etc., scheduled monthly, whichever is less. Each display must be inspected at least every 2 years.
6. Inspect document file for each item of equipment (if maintained) as a minimum, once each year.
7. Inspection frequency is determined locally. The size of the TO file and (or) work center (for FO inspections) should be considered when establishing inspection baselines (IBL).

Attachment 4

FLYING UNIT OBSERVATION WORK AREA REQUIREMENTS

Quarterly surveillance requirements shown in table A4.1 will be scheduled on a random, yet adequately distributed basis. For example, an inspection completed in the last week of a quarter should not be scheduled for inspection again during the first week of the new quarter.

Table A4.1. Flying Unit Observation Work Area Requirements.

I	A	B
T	Work Areas	Frequency
E		
M		
1	Data Management	Q(Quarterly)
2	Maintenance Operations Center	M(Monthly)
3	Plans and Scheduling	M
4	Quality Control	Q
5	Documentation	M
6	Training Management (includes plans)	Q
7	Repair Cycle Monitor Function	M
8	Maintenance Supply Liaison (if applicable)	M
9	Electro/Mechanical	Q
10	Instrument	Q
11	Comm/Nav	Q
12	PMEL (if applicable)	Q
13	Plating (if applicable)	Q
14	Transportation (if applicable)	Q
15	Sheet Metal	Q
16	Welding (includes chemical cleaning if applicable)	Q
17	Engine Management	M
18	Engine (includes Flight Line Support if applicable)	Q
19	Sound Suppressor/Hush House	Q
20	Test Cell	Q
21	Fuels (includes Fuel Cell)	Q
22	Nondestructive Inspection (NDI)	Q
23	Transient Alert	Q
24	Post Dock	Q
25	CASS (if applicable)	Q
26	AGE	Q
27	Battery	Q

28	Egress	Q
29	Fabric	Q
30	Pneudraulics	Q
31	Machine	Q
32	Paint (includes paint hanger and disposal of hazardous waste)	Q
33	Corrosion	Q
34	Survival Equipment (if applicable)	Q
35	Wash Rack	Q
36	Aircraft Flight Line (includes offices)	Q
37	Aircraft Scheduled Maintenance Facility	Q
38	Aircraft Unscheduled Maintenance Facility	Q
39	Plastic Media Blasting Facility	Q
40	Auxiliary Fields	SA(Semiannual)
41	Crash Recovery (crane and equipment)	SA
42	Aero Repair (if applicable)	Q
43	Wheel and Tire	Q
44	COMBS (CLS Contracts)	Q
45	Munitions Storage Facility	Q
46	Munitions Buildup, Inspection, Maintenance, or Stockpile Storage	M
47	Munitions Stockpile and Inventory Validation, Documents File Inspection/Supply Point Jacket File, and Munitions Warehouse Location Asset Accuracy	M
48	Armament Systems Maintenance/Weapons Loading Facility	Q

Attachment 5

TRW OBSERVATION WORK AREA REQUIREMENTS

Table A5.1 is intended as a guide only for TRWs. QAEs identify actual observation area requirements in the QASP based on the actual organization of the unit. Quarterly surveillance requirements will be scheduled on a random, yet adequately distributed basis. For example, an inspection completed in the last week of a quarter should not be scheduled for inspection again during the first week of the new quarter.

Table A5.1. TRW Observation Work Area Requirements.

I	A	B
T E M	Work Areas	Frequency
1	Data Management	Q(Quarterly)
2	Maintenance Operations Center	Q
3	Plans and Scheduling	Q
4	Quality Control	Q
5	Documentation	Q
6	Training Management (includes plans)	Q
7	Repair Cycle Monitor Function	Q
8	Maintenance Supply Liaison (if applicable)	Q
9	Electro/Mechanical	Q
10	Instrument (if applicable)	Q
11	Comm/Nav (if applicable)	Q
12	Precision Measurement Equipment Laboratory (PMEL) (if applicable)	Q
13	Plating (if applicable)	Q
14	Sheet Metal (if applicable)	Q
15	Welding (includes chemical cleaning if applicable)	Q
16	Engine Management (if applicable)	Q
17	Engine (if applicable)	Q
18	Sound Suppressor (if applicable)	Q
19	Test Cell (if applicable)	Q
20	Meteorological Maintenance (if applicable)	Q
21	Auto Flight Control and Instrument (if applicable)	Q
22	Airborne Missile Maintenance (if applicable)	Q
23	Ground Missile Maintenance (if applicable)	Q
24	Cryogenics Maintenance and Environmental	Q
25	Trainer Development (if applicable)	Q
26	AGE	Q

27	Battery	Q
28	Bomb Navigation (if applicable)	Q
29	Electronic Trainer (if applicable)	Q
30	Pneudraulics	Q
31	Machine (if applicable)	Q
32	Corrosion	Q
33	Paint (includes paint hangar and disposal of hazardous waste)	Q
34	Survival Equipment (if applicable)	Q
35	Defensive Fire Control (if applicable)	Q
36	B-1B Avionics (if applicable)	Q
37	Tactical Sensor (if applicable)	Q
38	F-111 Avionics (if applicable)	Q
39	F-15 Avionics (if applicable)	Q
40	F-16 Avionics (if applicable)	Q
41	Weapons Maintenance (if applicable)	Q
42	Weapons Suspension Equipment Storage Area	Q
43	Precision Imagery/Audio (if applicable)	Q

Attachment 6

QAE ASSESSMENT METRICS

1. Does the QASP cover all flight line and shop locations during all shifts, including weekends?
2. Is there a QAE training program available and are QAEs adequately trained?
3. Does the QAEP include all areas of the contract?
4. Is the QAE unit effectively implementing a QAEP?
5. Do evaluation guides adequately cover all areas of the contract?
6. Is the QAE unit effectively identifying contract problems and concerns and forwarding these to the FAC and ACO, as well as following up on these areas?

NOTES:

1. The requirements listed above are minimum requirements and should be expanded upon to reflect each unit's program.
2. Each metric will be assessed as: "does not meet," "meets," or "exceeds requirements."
3. All metrics assessed as does not meet or as exceeds requirements will include an explanation.